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09/998,465

11/30/2001

Paul A. Fleenor

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07/21/2004

CORNING CABLE SYSTEMS LLC

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EXAMINER

WOOD, KEVIN S

ART UNIT

PAPER NUMBER

2874

DATE MAILED: 07/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/998,465

Applicant(s)

FLEENOR ET AL.

Examiner

Kevin S Wood

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 June 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. This action is responsive to the Amendment filed on 14 November 2003. No new claims have been added. No claims have been amended and no claims have been canceled. Claims 1-23 are currently pending in the application.

### ***Response to Declaration***

2. The Declaration filed on 23 June 2004 under 37 CFR 1.131 is sufficient to overcome the Holter et al. reference (U.S. Patent No. 6,542,673) and the Clark reference (U.S. Patent Application Publication No. 2002/0003934) for claims 1, 9, and 21.

### ***Response to Arguments***

3. Applicant's arguments, filed 23 June 2004, with respect to the rejection(s) of claim(s) 1, 9 and 21 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,542,673 to Holter et al. have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. Patent No. 4,691,986 to Aberson, Jr. et al.

4. Applicant's arguments, filed on 14 November 2003, with respect to the rejection(s) of claim(s) 2-8, 10-20 and 22-23 under 35 U.S.C. 102 and 103 have been fully considered and are not persuasive. The Declaration does not disclose that the

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inventions of claims 2-8, 10-20 and 22-23 were conceived and reduced to practice in the United States of America or in a NAFTA or WTO member country prior to the effective date of the references.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 2, 4, 6-18 and 20-23 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,691,986 to Aberson, Jr. et al.

Referring to claim 1, 2, 4, 6, and 7, Aberson, Jr. et al. discloses all the limitations of the claimed invention. Aberson, Jr. et al. discloses a ferrule body (12) defining a forward end, and opposed rearward end, and at least one passageway (11) extending between the forward end and the rearward end; and a fiber optic indicia (21) formed on a predetermined portion of a surface of the ferrule, wherein the fiber optic indicia comprises a predetermined pattern associated with data about the fiber optic assembly, wherein the data comprises at least one of an optical characteristic and a product characteristic. See Fig. 1-4, and their respective portions of the specification.

Referring to claim 8, Aberson, Jr. et al. discloses all the limitations of the claimed invention. Aberson, Jr. et al. discloses a ferrule body (12) can be made from metals, plastics or ceramics. See Fig. 1-4, and their respective portions of the specification.

Referring to claim 9-18 and 20, Aberson, Jr. et al. discloses all the limitations of the claimed method. Aberson, Jr. et al. discloses a method of marking a fiber optic component including the steps of: establishing a predetermined pattern of a fiber optic indicia, wherein the fiber optic indicia is associated with information about the fiber optic component; providing the component for marking; preparing a predetermined portion of the surface of the component for marking; and marking the predetermined portion of the surface in accordance with the predetermined pattern of the fiber optic indicia. See Fig. 3-4, and their respective portions of the specification.

Referring to claims 21-23, Aberson, Jr. et al. discloses all the limitations of the claimed method. Aberson, Jr. et al. discloses a method of marking a ferrule, including the steps of: establishing a predetermined pattern of a fiber optic indicia, wherein the fiber optic indicia is associated with information about the fiber optic assembly; providing the ferrule for marking; preparing a predetermined portion of a surface of the ferrule for marking; marking the predetermined portion of the surface in accordance with the predetermined pattern of the fiber optic indicia, using the fiber optic indicia to select optical assemblies for precision mating. See Fig. 1-4 and their respective portions of the specification.

7. Claims 2-4, 6, 7, 10-12, 15-18, 20 and 22-23 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,542,673 to Holter et al.

Referring to claims 2-4, Holter et al. discloses all the limitations of the claimed invention. Holter et al. discloses a ferrule body (304) defining a forward end (304a), and opposed rearward end, and at least one passageway extending between the forward end and the rearward end; and a fiber optic indicia (310) formed on a predetermined portion of a surface of the ferrule, wherein the fiber optic indicia comprises a predetermined pattern associated with data about the fiber optic assembly, wherein the data comprises at least one of an optical characteristic and a product characteristic. Holter et al. also disclosesdiscloses the indicia (310) are located on and near the end face of the ferrule and the passageway has an opening that is located at the forward end of the ferrule body (304). See Fig. 3-4, and their respective portions of the specification.

Referring to claims 6 and 7, Holter et al. discloses all the limitations of the claimed invention. Holter et al. discloses an optical fiber (302) extending at least partially through the at least one passageway such that an end portion of the optical fiber is exposed to a filter (306) at an end face of the forward end of the ferrule. Holter et al. also discloses that optical fibers (100) may have indicia located on the end face of the optical fibers. See Fig. 1-4, and their respective portions of the specification.

Referring to claims 10-11, Holter et al. discloses all the limitations of the claimed method. Holter et al. discloses a method of marking a fiber optic component including the steps of: establishing a predetermined pattern of a fiber optic indicia, wherein the fiber optic indicia is associated with information about the fiber optic component;

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providing the component for marking; preparing a predetermined portion of the surface of the component for marking; and marking the predetermined portion of the surface in accordance with the predetermined pattern of the fiber optic indicia. Holter et al. also discloses that the fiber optic indicia may be an alphanumeric character and that the fiber optical indicia comprise at least one symbol. See figures of the reference, along with their respective portions of the specification.

Referring to claim 12, Holter et al. discloses all the limitations of the claimed method. Holter et al. discloses that laser etching may be used to mark the component. See col. 8, lines 38-40.

Referring to claim 15, Holter et al. discloses all the limitations of the claimed method. Holter et al. discloses that the fiber optic indicia may comprise light sensitive indicia.

Referring to claims 16-18 and 20, Holter et al. discloses all the limitations of the claimed method. Holter et al. discloses that information consists of optical characteristics of the component, such as dimensions and performance data. See col. 8, lines 49-62.

Referring to claims 22-23, Holter et al. discloses all the limitations of the claimed method. Holter et al. discloses a method of marking a ferrule, including the steps of: establishing a predetermined pattern of a fiber optic indicia, wherein the fiber optic indicia is associated with information about the fiber optic assembly; providing the ferrule for marking; preparing a predetermined portion of a surface of the ferrule for marking; marking the predetermined portion of the surface in accordance with the

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predetermined pattern of the fiber optic indicia, using the fiber optic indicia to select optical assemblies for precision mating. See Fig. 3-4, and col. 8, lines 54-57.

8. Claims 12 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication No. 2002/0003934 to Clark.

Referring to claims 12 and 13, Clark discloses all the limitations of the claimed method. Clark discloses a method of marking a fiber optic component including the steps of: establishing a predetermined pattern of a fiber optic indicia, wherein the fiber optic indicia is associated with information about the fiber optic component; providing the component for marking; preparing a predetermined portion of the surface of the component for marking; and marking the predetermined portion of the surface in accordance with the predetermined pattern of the fiber optic indicia. Clark also discloses that the indicia used to mark the component may include applying color or a combination of colors in order to identify the component. See the figures of the reference, along with their respective portions of the specification. Also see paragraph [0009] of the reference.

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 3, 5 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,691,986 to Aberson, Jr. et al.

Referring to claim 3, Aberson, Jr. et al. discloses the indicia are located on the end face of the forward end of the ferrule. However, Aberson, Jr. et al. does not appear to disclose that location of the indicia is the end face of the ferrule. It would have been obvious to one having ordinary skill in the art at the time the invention was made to select any suitable location for the indicia on the face or end face of the ferrule, since discovering an optimum or workable location for the indicia involves only routine skill in the art.

Referring to claim 5, Aberson, Jr. et al. discloses the indicia are located very near the passageway at the end face of the forward end of the ferrule. However, Aberson, Jr. et al. does not appear to disclose that location of the indicia are within at least about 150 microns from the opening of the at least one passageway. It would have been

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obvious to one having ordinary skill in the art at the time the invention was made to select any suitable location for the indicia on the face of the ferrule, since it has been held that where the general conditions of the claim are disclosed in the prior art, discovering an optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Therefore, discovering an optimum distance between the passageway and the indicia would involve only routine skill in the art.

Referring to claim 19, Aberson, Jr. et al. discloses all the limitations of the claimed invention, except Aberson, Jr. et al. does not appear to specifically disclose that the performance data comprises at least one of the attenuation data, back reflection data, and insertion loss data. However, Aberson, Jr. et al. makes it clear the indicia can include any identifying information. See col. 8, lines 49-62. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include any relevant performance information within the markings applied to the optical component. It would be within the general skill of a worker in the art to select known performance measurements to be included in the information marked on the component.

12. Claims 5, 8 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,542,673 to Holter et al.

Referring to claim 5, Holter et al. discloses the indicia are located very near the passageway at the end face of the forward end of the ferrule. However, Holter et al. does not appear to disclose that location of the indicia are within at least about 150 microns from the opening of the at least one passageway. It would have been obvious

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to one having ordinary skill in the art at the time the invention was made to select any suitable location for the indicia on the face of the ferrule, since it has been held that where the general conditions of the claim are disclosed in the prior art, discovering an optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Therefore, discovering an optimum distance between the passageway and the indicia would involve only routine skill in the art.

Referring to claim 8, Holter et al. discloses all the limitations of the claimed invention, except Holter et al. does not appear to disclose the material that the ferrule is made from metals, polymers, plastics, ceramics, glass or crystal. It would have been obvious to one having ordinary skill in the art at the time the invention was made to select any suitable material for making the ferrule, since it has been held that to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Referring to claim 19, Holter et al. discloses all the limitations of the claimed invention, except Holter et al. does not appear to specifically disclose that the performance data comprises at least one of the attenuation data, back reflection data, and insertion loss data. However, Holter et al. makes it clear that any additional information that the user may require. See col. 8, lines 49-62. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include any relevant performance information within the markings applied to the optical component. It would be within the general skill of a worker in the art to select known

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performance measurements to be included in the information marked on the component.

### ***Conclusion***

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin S Wood whose telephone number is (571) 272-2364. The examiner can normally be reached on Monday-Thursday (7am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney B Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KSW

  
AKM ENAYET ULLAH  
PRIMARY EXAMINER